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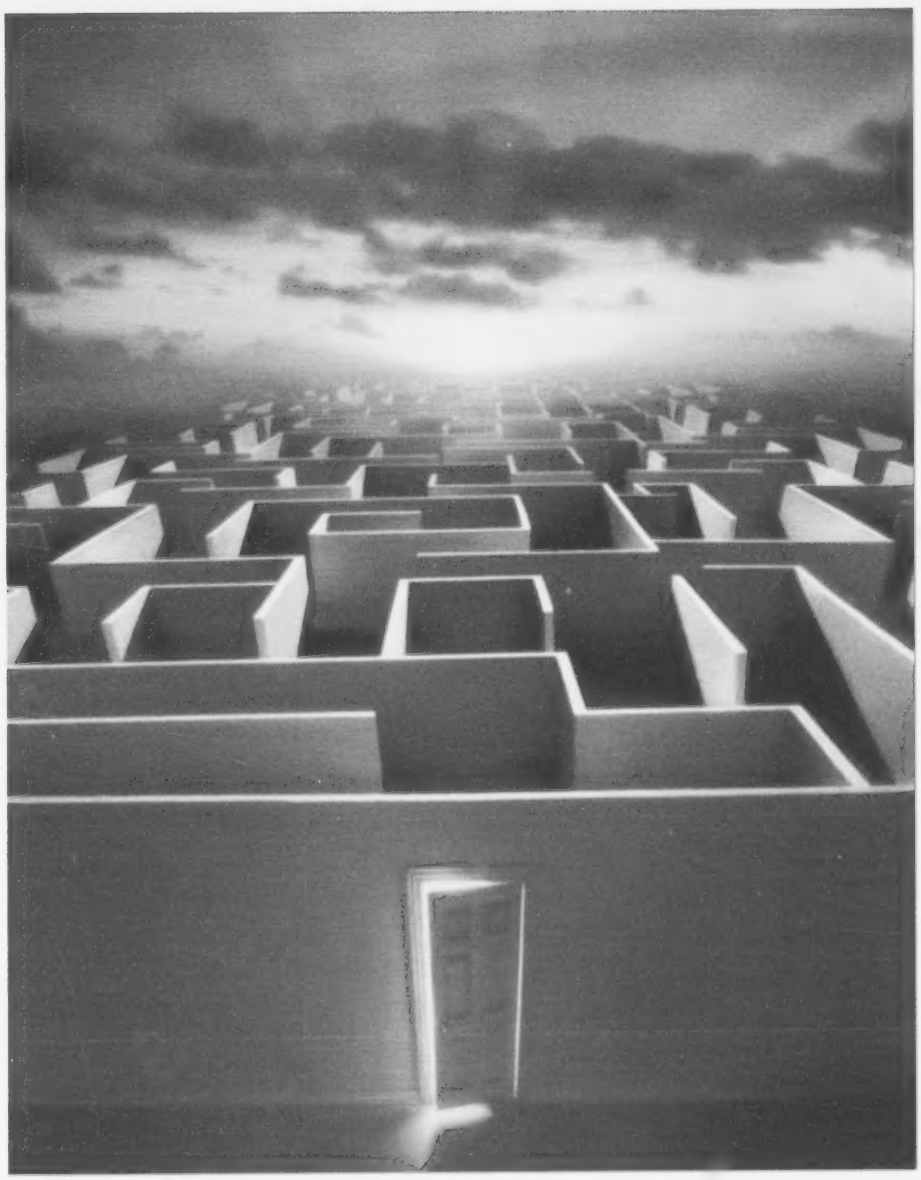
- FINANCES IN THE GOLDEN YEARS
- HIGH-TECH—TWO YEARS AFTER THE BOOM



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.. not available for a specific reference period
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p preliminary
r revised
x confidential
E use with caution
F too unreliable to be published

Highlights

In this issue

Finances in the golden years

- In 1999, the net worth of senior families was more than double that of non-senior families ($155,000 versus $69,000).
- The median value of financial assets for senior families was more than twice that for non-senior families—$35,000 versus $14,000. The largest non-financial asset for senior families was their home—a median value of $120,000.
- Few seniors have debts—only 27% of senior families had debt in 1999. Of these, 82% were comfortable with their level of debt.
- Two-thirds of senior families have private pension assets. In 1999, the median value of these assets was $115,700.
- For almost one-half (46%) of senior families, income exceeded expenses, indicating that some type of savings continues after the traditional age of retirement.
- About 1 in 10 senior families had expenses greater than their income. However, 90% of these families were able to pay their bills on time.

High-tech—two years after the boom

- After a sharp decline of 10% in 2001, employment in computer and telecommunications (CT) industries stabilized somewhat in 2002 and into 2003. In the first quarter of 2003, it was 570,000, down 3% from a year earlier and 12% below its 2001 peak.
- After shedding one in four workers between the first quarters of 2001 and 2002, the manufacturing part of the CT sector was essentially unchanged a year later. In the services component, a large drop in telecommunications employment was almost offset by a rebound in computer design and related services.
- While demand for high-tech workers decreased, median wage rates for employees did not fall, in part because of the continued layoff of lower-skilled, lower-paid workers.

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Finances in the golden years

Cara Williams

Over much of the 20th century, a substantial amount of attention focused on the economic conditions of Canada's seniors (those aged 65 and over). In the past, many seniors had to work their whole life, and retirement was virtually unheard of. Those who were unable to save any money or to work because of illness and who had no family or friends to rely on spent their remaining years in poverty.

Economic conditions for today's seniors are very different. Since the early 1980s, incomes have risen faster for those 65 and over than for those under 65 (Lindsay and Almey 1999). In fact, between 1981 and 1997, income rose about 18% for seniors while declining for those aged 15 to 64. Nevertheless, seniors still have lower average incomes—not surprising given that most are no longer in the labour force and have no employment income.

However, the financial well-being of seniors is not determined by income alone; wealth also plays a part. While non-seniors are trying to build up their stock of wealth (buying homes, building up RRSPs or other investments), many seniors have already accumulated substantial wealth to draw on in times of need. This subject is certain to remain under close scrutiny as the proportion of seniors increases. Policy and program development centering on this group will no doubt figure prominently in forthcoming years, so it will be crucial to have a complete financial picture that highlights their needs.

Using the 1999 Survey of Financial Security (SFS) (see *Data source and definitions*), this article examines sources of income and wealth among Canada's seniors. It also looks at their debts and preparedness for unexpected expenses. Additionally, two groups of seniors that potentially face financial insecurity are examined: unattached women and those whose expenses exceed their income.

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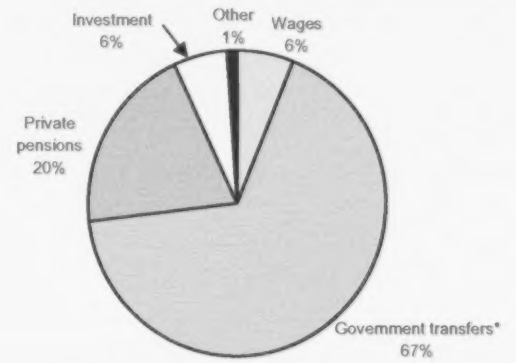
Government transfers the major source of income for most seniors

Particularly during RRSP season, Canadians hear that they must save for retirement and not rely on government to meet their income requirements in old age.[1] However, for the majority of today's seniors, government transfers are the principal source of income (Chart A).

In 1999, seniors had four main sources of income: government transfers, private pensions, investment income, and employment income. For two-thirds of senior families (67%), government transfers made up the largest portion of income. Private pensions were the principal source for another 20%, and employment income for another 6%. While almost half (49%) had some type of non-pension financial investments,[2] investment income was the main income source for only 6%. This is perhaps surprisingly low given the media attention paid to the importance of investing for future retirement income.

Chart A: Most seniors rely on government transfers as their main source of income.



Source: Survey of Financial Security, 1999
** CIQPP, OAS, GIS, and other transfers*

Data source and definitions

The **Survey of Financial Security** (SFS) was conducted from May to July 1999. The sample represented all families and individuals in Canada except residents of the Territories, members of households on Indian reserves, full-time members of the armed forces, and residents of institutions. Data were obtained for all family members aged 15 and over.

Family unit: economic family or unattached individual

Economic family: two or more persons living in the same dwelling and related by blood, marriage, common law or adoption. Types of senior economic families are based on the characteristics of the major income recipient who is 65 or older.

Unattached individual: person living alone or with unrelated persons.

Total income: income from all sources (including government transfers) before deduction of federal and provincial taxes. Total income is also known as income before taxes (but after transfers). It includes market income and government transfer payments.

Employment income: wages, salaries, and income from self-employment.

Government transfers: all direct payments to individuals and families by the federal, provincial and municipal governments: Old Age Security, the Guaranteed Income Supplement, Spouse's Allowance, Canada and Quebec Pension Plan benefits, Child Tax benefits, Employment Insurance benefits, workers' compensation benefits, credits for the goods and services tax or harmonized sales tax, provincial or territorial tax credits, social assistance payments, and other payments.

Assets: **financial** assets (registered retirement savings plans (RRSPs), other registered plans, deposits in financial institutions, mutual/investment funds, stocks, savings bonds and other bonds, and other financial assets) and **non-financial** assets (principal residence, other real estate, vehicles, other non-financial assets, and equity in a business). The net present value of employer-sponsored pension plans is not included.

Debts: mortgages, lines of credit, credit card balances, student loans, vehicle loans, and other debt.

Net worth (wealth): difference between total assets and total debts. Excluded are the value of work-related pension plans, and future entitlements to social security provided by the government in the form of Canada or Quebec Pension Plan benefits and Old Age Security. Also excluded is human capital, measured in terms of the value of the discounted flow of future earnings. Those with no net worth have debts equal to or greater than assets.

Bootstrap methods were used to calculate the standard errors and coefficients of variation for the SFS.

How much income is enough?

Ensuring that seniors have enough income during retirement was an ongoing policy issue for most of the 20th century. But determining what constitutes an adequate income is difficult. For example, if seniors are no longer in the workforce, saving for retirement, paying for children, or making mortgage payments, is it reasonable to compare their income with that of non-seniors who may be trying to do all these things? At the same time, do seniors incur significant expenses that younger Canadians do not have? For example, private health care expenses probably increase with age. But on balance, some experts believe that seniors can have significantly lower incomes than non-seniors yet still maintain a similar standard of living (Hamilton 2001).

Various pension and income support programs have been developed and modified over the years in an attempt to ensure that seniors have adequate income (see *The evolution of public pension plans in Canada*). In 1998, about 2.5 million[3] Canadians received retirement pensions from the Canada Pension Plan (CPP).[4] The average monthly payment for these individuals was $407 (HRDC 2003). Additionally, about 3.7 million received Old Age Security (OAS), of whom 1.4 million also received the Guaranteed Income Supplement (GIS). Based on 1998 rates, a senior living alone and relying solely on OAS and GIS would have an annual income of just under $11,000. For senior couples with no other income source, annual income would be about $17,400 (Statistics Canada 2001).[5]

It is difficult, if not impossible, to determine whether income from government transfers alone is adequate since seniors are not a homogenous group and their expenses vary. However, the income of a senior family no longer saving for retirement, paying off a mortgage, or supporting young children is much more likely to go further than that of a young family with all these expenses. Indeed, according to some actuaries, a mortgage-free retired couple living solely on CPP, OAS, GIS, and tax credits would have a 'consumable income' of $24,000—the equivalent of a middle-income family earning $63,400 after factoring in tax, retirement savings, and mortgage payments (Hamilton 1999). The 1999 SFS indicates that almost 80% of senior couples and 56% of all senior families had an income of at least $24,000.

Although the comparison of senior and non-senior incomes is not straightforward, it provides a jumping-off point (Table 1). According to the SFS, the median

Table 1: Incomes, assets and debts

	All families	Senior families								Non-senior families
		All	65-74	75+	Unattached		Couples	Other types		
					Men	Women		Men	Women	
	'000									
Number of families	12,215.6	2,231.8	1,262.8	969.0	266.8	785.2	933.3	147.4	99.1	9,983.9
	'000 $									
Total income	39.6	26.4	30.0	22.8	19.8	16.0	34.5	47.4	27.0	44.4
Assets	136.6	161.8	184.7	135.7	113.0[E]	80.2	222.5	234.8	146.0	129.6
Financial assets*	16.5	35.0	40.2	30.0	F	26.0	52.5	38.5[E]	F	14.0
Non-financial assets*	103.0	105.0	121.0	83.5	49.0[E]	33.0[E]	147.8	171.8	107.3	103.0
Principal residence**	125.0	120.0	120.0	110.7	100.0	103.0	125.0	150.0	100.0	130.0
Debts*	29.0	6.5	8.6	3.5[E]	F	F	10.0	19.0[E]	F	32.0
Net worth	81.0	154.6	174.7	132.4	111.1[E]	76.6	216.0	212.0	134.0	69.1

Source: Survey of Financial Security, 1999
* *For those with assets/debts.*
** *For those who own their principal residence.*

income of senior families in 1998 was about 40% lower than that of non-senior families—$26,400 compared with $44,400. Income comparison is complicated since a family's income varies not only by stage of life but also by the type of family. For example, in the non-senior population, female lone-parent families had a median income in 1998 of about $21,000, compared with $60,000 for couples with children. In the senior population, unattached women had the lowest median income of all family types at about $16,000; men in 'other' types of families had the highest at $47,400. Even within family types pronounced differences can be seen. This is especially true for unattached seniors where widows and widowers are in a more advantageous financial position.[6] This is no doubt partly a function of the economies of scale associated with having lived with a spouse and of possibly having had two incomes. In addition, the widowed may have a survivor pension.

A further complication arises from the age of seniors. Even though income is lower, research shows that the expenditures of seniors decrease as they age. For example, the Survey of Household Spending has shown that younger seniors have higher expenditures than older ones (Hamilton 2001). Just as income and expenditures differ, so also does the financial picture (see *Young and old seniors*). Such variations exacerbate the difficulty in determining just how much income is enough.

Some saving continues into old age

The life-cycle hypothesis states that income and wealth accumulate until retirement. At this point, the individual or family begins to live on the proceeds of their wealth and dissaving occurs. Recent analysis for the

Young and old seniors

Just as the non-senior years entail various life stages, the senior years are also not uniform. For example, the income and attitudes of young seniors (65 to 74) may be quite distinct from those of seniors 75 or older.

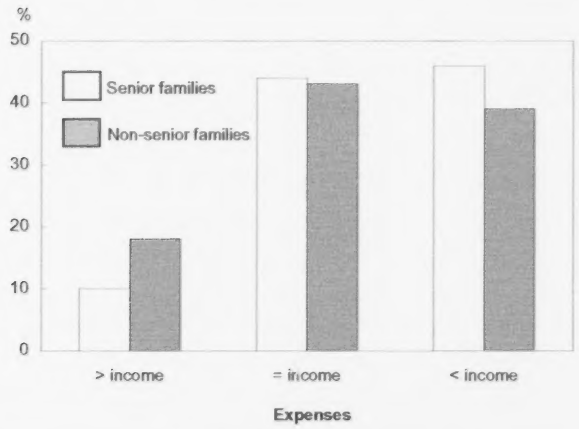
The median income of older seniors was about 25% less than that of young seniors ($22,800 versus $30,000). The same pattern holds true for assets. Older senior families' assets were about 25% less than those of their younger senior counterparts. Although assets of the older group declined, debt does not appear to have been an issue for them. The median value of debt for senior families, regardless of age, was zero.

Since the value of older senior families' assets was lower than that of younger senior families, it is not surprising that the median value of their net worth was also about 25% lower ($132,400 versus $174,700). However, even with lower income, assets and net worth, older families were less likely to follow a budget and more likely to have income in excess of their spending. This is not surprising since research shows that as seniors age, expenses decrease (Hamilton 2001). Indeed, about 50% of older senior families stated that in 1998 their income exceeded expenses (compared with 43% of younger senior families), indicating that some older families continue to save for a rainy day.

Netherlands shows that for many seniors, dissaving does *not* occur; that is, many seniors are able to live off pensions or interest from investments without having to liquidate financial assets or sell their home or other sources of wealth (Alessie, Lusardi and Aldershof 1997). The 1999 SFS supports this notion. Almost one-half (46%) of Canada's senior families reported that their income exceeded expenses—that is, for many senior families, some type of savings continued after the traditional age of retirement.[7] However, declines in interest rates since 2000 have resulted in very low yields for many investments. Coupled with this has been the large decline in the stock market, which has eaten away at the value of mutual funds and dividends. It is reasonable to assume that the rate of dissaving fluctuates with the market, and has likely increased since the SFS was conducted in 1999.

At the other end of the spectrum, about 10% of senior families reported that expenses were greater than income (Chart B). It is important to determine if these individuals are just dissaving as the life-cycle hypothesis contends or if they face financial insecurity.

Chart B: Expenses exceeded income in only 10% of senior families compared with 18% of non-senior families.



Source: Survey of Financial Security, 1999

Home is where the assets are

Because of the stage of seniors within the life cycle, a discussion of their financial well-being is not complete using income alone. Assets—type and value—are also part of the equation.

The SFS collects information on three types of assets: financial, non-financial, and business equity. Financial assets are relatively easy to convert to cash and include GICs, stocks, bonds, and RRSPs. Non-financial assets include the principal residence, vacation property, vehicles, house contents, and collectibles. Business equity is the value of a business after outstanding debts have been deducted.[8]

Neither senior nor non-senior families had substantial financial assets. The median value of financial assets for all senior families was about $35,000 in 1999, compared with about $14,000 (less than half) for non-senior families. As with income, financial assets varied by family type. Senior couples had the highest median value at almost $53,000, while unattached senior women had the lowest at about $26,000. The value of employer-sponsored pension plans was not included because they are not cashable. However, the actuarial value of these plans can be substantial. For seniors with such plans, the net present value was almost $116,000 (see *Private pension savings*).

The largest source of assets for seniors is non-financial. Not surprisingly, for the more than two-thirds of seniors who were homeowners, the home was the most valuable asset—a median value of about $120,000 in 1999. Most senior families owning their principal residence were mortgage-free (Table 2). About 61% owned their principal residence outright, and 7% had a mortgage. While a home is not as quickly convertible to cash as financial assets, it can be sold or the family can downsize to another and live on some of the net proceeds. Recently, reverse mortgages have become an option for seniors whose wealth is concentrated in their home.[9]

Few seniors have debts

Looking at debt in relation to assets can provide a better indication of a family's financial situation. For example, while young families who buy a home may carry a substantial amount of debt, the debt level

Table 2: Homeownership status

	All families	Senior families						Non-senior families
			Unattached			Other types		
		All	Men	Women	Couples	Men	Women	
	%							
Own with no mortgage	27.7	60.6	47.6	45.5	75.7	72.7	56.0	20.3
Own with mortgage	32.7	6.6	4.2[E]	3.0[E]	7.9	13.3[E]	19.0[E]	38.5
Do not own	39.6	32.8	48.2	51.6	16.4	14.0[E]	25.0[E]	41.2

Source: Survey of Financial Security, 1999

becomes more reasonable when looked at in relation to the home's value. Concern arises when debt is high and assets and income are low, as may be the case for seniors living on a fixed income.

Few seniors have debt: about 73% of senior families in 1999 reported having no debt. Indeed, the median value of debt for all senior families was zero, compared with $14,000 for non-senior families. For the 610,100 senior families carrying debt, the median value was about $6,500, compared with about $32,000 for non-senior families. However, the amount of debt most seniors carry is relatively low. About 16% of senior families with debt owed less than $500, while about 25% owed more than $25,000.

Seniors also carry the lowest debt-to-asset ratio. Senior families owed an average of $3 for every $100 in assets, compared with $31 for every $100 for those under 25.

Net worth

The net worth (wealth) of a family is the total value of its assets minus debts.[10] Even though a family may have substantial assets, a lot of debt may mean that net worth is low, zero or even negative. For example, an unattached individual just out of school may have few assets and a student loan, and therefore a negative net worth. While income and net worth are positively related, the relationship is not always perfect. For example, a family who has low income but substantial assets and little debt may still have a relatively high net worth—often the case for seniors.[11]

The median net worth of Canada's seniors is fairly substantial. In 1999, it was about $155,000 compared with $69,000 for non-senior families. Not surprisingly,

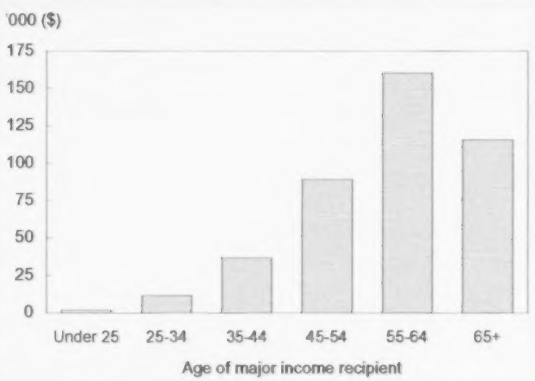
Private pension savings

Private pension assets offer another layer in a multi-layer retirement income plan. These assets include individual savings in RRSPs and RRIFs, the value of benefits earned through employer-sponsored pension plans, as well as other pension savings such as annuities and deferred profit-sharing plans.

In 1999, two-thirds of senior families had some type of private pension assets. The median value of such assets for those 65 and older was $115,700—second only to those aged 55 to 64. This is not surprising given that those aged 55 to 64 are in pre-retirement or early retirement and at their peak in terms of pension wealth, while those 65 and over have begun drawing down their pensions.

For more information on private pension savings see Statistics Canada (2001).

Median private pension assets of seniors second only to those aged 55 to 64.



Source: Survey of Financial Security, 1999

The evolution of public pension plans in Canada

At the beginning of the 20th century, the situation for seniors was bleak. For most, retirement was not an option. If a person became ill and unable to work, the prospect was to rely on family for support or else face living the remainder of life in poverty. By 1908, in response to the demand to help the elderly poor, the government began a program of annuities. It was built on the belief that individuals must plan for their future and shoulder the cost of their retirement. However, the program was not successful since those for whom it was designed did not have the means to purchase the annuities.

It was not until 1927 that the first public pension legislation (the Old Age Pensions Act) became law. The pension was available to those who passed a means test. It was also restricted to British subjects aged 70 and over who had lived in Canada for at least 20 years. The maximum pension amount was $20 per month.

Old age pensions became increasingly restrictive during the Depression. In addition to the means test, provinces passed their own legislation to limit those who could qualify.

After World War II the economy began to boom, and most individuals saw an increase in their standard of living. However, because old age pensions did not allow for cost of living increases, their value eroded over time. Many seniors again found themselves living out their last years in financial hardship.

In 1952 the Old Age Security Act became law, establishing the first universal, federally funded pension for all men and women aged 70 and over. An Old Age Assistance allowance was also introduced. The allowance was designed for seniors between the ages of 65 and 69 whose income was below a certain threshold.

Despite these programs, many seniors still had little. During their working years, most had not had jobs that offered an employee pension plan. Even those who had paid into such a plan were often unable to collect because the contributory periods were very long or the plans were not portable from one employer to another. In response, the federal government introduced the Canada Pension Plan (CPP) in 1966. (The Quebec government had previously launched its own Quebec Pension Plan [QPP].) This was a compulsory, contributory program for both employees and the self-employed between the ages of 18 and 70. The plan provided a source of income for seniors as well as insurance for families in the event of death or disability of the principal wage earner.

The next year the Guaranteed Income Supplement was established. It was tied to the Old Age Security pension for those who retired before they could take advantage of the C/QPP.

Between 1968 and 1989, the CPP underwent a variety of modifications designed to recognize changes in society as well as in economic conditions. Some of these included the lowering of the age of eligibility, the indexing of benefits, and the clawback of Old Age Assistance beginning in 1989. As a result of concerns about the long-term viability of CPP, the system moved in 1998 from pay-as-you-go to fuller funding. This resulted in a phase-in period of increasing contribution rates.

Today's income support programs for seniors have changed enormously from the original 1927 Old Age Pensions Act. For example, in 1998 just over 2.5 million seniors received a CPP retirement pension averaging $407 per month. In the same year, almost 3.7 million received Old Age Security benefits averaging $398 per month; about 1.4 million of these received an average monthly payment of $293 under the Guaranteed Income Supplement program. In addition, some provinces have their own income support programs. For example, Alberta and British Columbia provide such benefits to seniors who qualify.

For more information on the history of Canada's public pension plans see the Canadian Museum of Civilization's Web site at www.civilization.ca/hist/pensions/cpp1sp_e.html. Current OAS, GIS and CPP rates and beneficiaries are available in *The ISP Stats Book* (see HRDC 2003 in the references).

just as income varies by family type, so does net worth. Unattached senior women had the lowest median net worth at about $77,000, while senior couples had the highest at about $216,000.

Seniors more comfortable than non-seniors with their level of debt

Having examined the dollar value of income, assets, debts and net worth, the next step is to investigate some of the behaviour senior families exhibit with respect to their finances. This can provide a self-reported measure of financial comfort. While individuals and families budget for a variety of reasons (to save, track expenses, or pay for necessities), seniors living on a fixed income might be expected to need to adhere to a monthly budget (Table 3). However, only about 3 in 10 senior families reported following a budget, compared with about 5 in 10 non-senior families. This finding was relatively constant regardless of family type.

Discomfort with the amount of debt can bring financial worries and indicate financial instability. Conversely, if debt is low and payments are manageable, debt may not be of concern. This appears to be the case for seniors. Only about 27% of senior families had some debt, and the vast majority (82%) were comfortable with their level.

Table 3: Approaches to financial affairs

	All families	Senior families						Non-senior families
		All	Unattached		Couples	Other types		
			Men	Women		Men	Women	
	%							
Used asset to pay debt	5.4	2.0[E]	F	F	1.7[E]	F	F	6.2
Have budget	44.8	31.7	21.7	31.5	33.9	34.0	35.1	47.8
Behind in payment	13.7	2.4	F	1.2[E]	2.0[E]	F	F	16.3

Source: Survey of Financial Security, 1999

Falling behind in bill payments can be stressful and is another indication of financial insecurity. Only 2% of senior families reported being behind two months or more in a bill, rent or mortgage payment in 1998, compared with about 16% of non-senior families.

Having enough income to pay for day-to-day expenses or to make debt payments provides some indication of financial security. However, the means used by families to pay for unexpected expenses provides a fuller picture of financial security. Often families may be able to pay for small expenses but unable to cope with those that are large or unforeseen. Only a handful of senior families felt unable to pay for an unexpected expense of $500 (Table 4). When asked about an expense of $5,000, almost one-half stated that they would use savings, compared with only 18% of non-senior families. Another 5% said they would sell an asset, while 33% said they would borrow from a friend or bank, or use a combination of savings and borrowing. Indeed, senior families were half as likely as

Table 4: Paying for unexpected expenses

	All families	Senior families						Non-senior families
		All	Unattached		Couples	Other types		
			Men	Women		Men	Women	
	%							
$500								
Use savings	55.4	75.0	75.1	72.5	79.6	68.4	61.8	51.1
Borrow from friend or relative	10.4	4.6	5.5[E]	6.7	1.6[E]	6.5[E]	10.2[E]	11.8
Borrow from financial institution	21.2	12.8	11.9[E]	11.1	13.3	19.6[E]	15.5[E]	23.0
Use savings and borrow	4.0	2.1	F	1.7[E]	2.5[E]	F	F	4.5
Sell an asset	2.4	1.3[E]	F	F	F	F	F	2.6
Could not do it	2.5	2.0	F	2.9[E]	F	F	F	2.6
Don't know	0.7	0.6[E]	F	F	F	F	F	0.7
Other	3.4	1.5[E]	F	2.4[E]	F	F	F	3.8
$5,000								
Use savings	23.4	48.2	53.7	45.3	52.4	41.4	26.3[E]	17.9
Borrow from friend or relative	7.5	5.2	4.6[E]	8.0	3.1[E]	F	F	8.0
Borrow from financial institution	45.2	24.0	18.9	19.8	27.3	31.5	28.3	50.0
Use savings and borrow	3.5	3.6	F	2.4[E]	4.1[E]	F	F	3.5
Sell an asset	4.0	4.7	F	5.2[E]	4.3[E]	F	10.7[E]	3.8
Could not do it	8.6	7.5	10.9[E]	10.9	3.4[E]	6.0[E]	12.8[E]	8.8
Don't know	2.3	2.4	F	3.4[E]	1.3[E]	F	F	2.2
Other	5.5	4.3	3.2[E]	5.0	4.0	F	F	5.8

Source: Survey of Financial Security, 1999

non-senior families to borrow from a financial institution (24% versus 50%). About 8% of senior families and 9% of non-senior families stated that they would be unable to make such an expenditure.

Unattached senior women and seniors whose expenses exceed their income: financial insecurity or dissaving?

While in general the financial position of Canada's seniors is one of relative well-being, two senior groups deserve further investigation—unattached women and families whose expenses exceed their income.[12] Unattached senior women are traditionally thought to be among the most financially disadvantaged family types. Of all senior family types, unattached women have the lowest income, assets and net worth. Additionally, while they are more likely to own a home than many non-senior family types, they have the lowest likelihood within the senior population (48%).

Given that unattached senior women have less income and wealth than other senior family types, one might assume that they live on a budget. However, at 32%, they were less likely than non-senior families (48%) and no more likely than other senior families to follow a budget.

Another measure of the financial stability of this group is their ability to pay for unexpected expenses. Most felt able to handle an expenditure of $500, and only about 11% stated that they would be unable to handle one of $5,000—only slightly more than in the general senior population (8%).

The SFS also allows an examination of seniors whose spending exceeds their income. About 1 in 10 senior families (216,000) fell into this category. At first glance, these families may appear to be facing financial instability. But if examined within the life-cycle hypothesis, they may have begun to dissave as the theory suggests. Are these families more likely to have lower incomes than other senior families, or are they just drawing down their wealth? How does the value of their assets compare with other senior families? Also, how do they handle unexpected expenses?

Senior families whose spending exceeded income had only a slightly lower median income than other senior families ($25,500 versus $26,500). However, the median value of assets showed a greater difference—$147,300 compared with $164,000 for other senior families. Again the largest share came from the value of a home. Median net worth was about $35,000 less ($121,500 versus $158,000).

Since expenses of these families surpassed income, one might expect a large number to be unable to pay their monthly bills. However, 9 out of 10 were able to pay their bills on time (compared with 98% in the general senior population).[13] This suggests that many of these families may have begun to draw down their assets. A relatively large proportion had to be careful with their money—about 43% followed a budget compared with 30% of other senior families.

Unexpected expenses can be a problem for senior families living on a fixed income, particularly if expenses exceed income. However, only about 10% in this position stated that they would not be able or did not know how to deal with an unexpected expense of $5,000—about the same as in the general senior population. Some 35% stated they would use savings, and the remainder indicated other means.[14]

Summary

Although income is often used as an important indicator of financial well-being, wealth can be equally important—particularly in the case of seniors, who are in a unique financial position within the life cycle.

Income support programs for seniors in Canada are fairly extensive. The Canada and Quebec Pension Plans, Old Age Security, and the Guaranteed Income Supplement all provide a measure of financial security. Additionally, some provinces have their own income supplements. These programs play an important role in the income for seniors. Indeed, the 1999 Survey of Financial Security indicates that government transfers were the major source of income for two-thirds of senior families. Moreover, almost half of senior families stated that their income exceeded spending, indicating that some savings continued past the traditional retirement age.

Not surprisingly, the major asset of senior families is their home. Almost three-quarters had no debt and few followed a budget. However, as with younger families, large unforeseen expenses can be crippling for seniors. Indeed, about 8% of senior families and 9% of non-senior families felt they would be unable to pay for an unexpected expense of $5,000.

Notes

1 RRSPs have probably been less important as a retirement strategy for older seniors (75+) than for younger seniors (65 to 74) and non-seniors.

2 These do not include term deposits, GICs, or the value of deposits in chequing or savings accounts. The value of RRSPs is contained in the private pensions category.

3 Another 400,000 Canadians received a combination of retirement and survivor pensions.

4 Individuals in Quebec belong to the Quebec Pension Plan (QPP). In 1998, about 870,000 individuals received an average of $365 per month in QPP retirement benefits.

5 This does not include C/QPP retirement benefits.

6 One example of the difference within this group is net worth. Widowed unattached seniors had a median net worth more than 70% higher than that of other unattached seniors. Detailed financial breakdowns of widowed unattached seniors are not possible because of small sample size.

7 It is not possible from SFS data to determine if senior families who are saving are going without or whether they are forcing down their expenses to ensure savings.

8 The estimates for business equity are not sufficiently reliable to be released.

9 A reverse mortgage, through the Canadian Home Income Plan (CHIP), allows Canadian homeowners 62 and over to convert a portion of the equity of their home into an income stream while living in and owning their home. The amount that can be obtained is between 10% and 40% of the assessed value of the home, depending on the age of the owners—the older the owners, the larger the percentage. For more information on reverse mortgages, see the CHIP web site at http://www.chip.ca.

10 Does not include the value of employer-sponsored pension plans.

11 For more general information on wealth and net worth see Augustin and Sanga (2002).

12 These two groups are not mutually exclusive. About one-third of senior families whose expenses exceed income are unattached women.

13 These individuals responded no when asked if they were two or more months behind in payments.

14 This includes borrowing, a combination of savings and borrowing, selling an asset, or some other means.

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High-tech—two years after the boom

Geoff Bowlby

With a collapse in demand in 2001 for their products and services, the high-tech sector experienced a number of high-profile layoffs. At the peak of the boom in the first quarter of 2001, the computer and telecommunications (CT) industries[1] employed 650,000 people. A year later, the number had dropped to 586,000 (-10%), and the unemployment rate had risen from only 3.9% to 6.6%.[2]

After the layoffs began to subside, the woes of the high-tech sector no longer made headlines. But what happened after March 2002? How did the high-tech workforce change in the next year? In short, CT employment stabilized. But beneath the relative calm, the turmoil and restructuring continued. Some CT workers, most notably the lowest skilled, continued to face layoff, while others enjoyed somewhat of a recovery.

This article looks at occupations in the high-tech industries, focusing on skilled and less-skilled workers. The second part of the analysis shows how average earnings levels and wage distributions have changed in CT industries in the last couple of years.

General overview

After a sharp decline of 10% in 2001, employment in CT industries stabilized somewhat in 2002 and into 2003. In the first quarter of 2003, it was 570,000, down 3% from a year earlier and 12% below its 2001 peak (Chart A).

In Canada's four high-technology hubs—Toronto, Montréal, Ottawa-Gatineau and Vancouver—employment remained below its peak of two years earlier but was stable in all but Vancouver (Table 1). Of the four centres in 2002, Vancouver had the highest concentration of workers in telecommunications—currently the fastest declining component of the CT industries.

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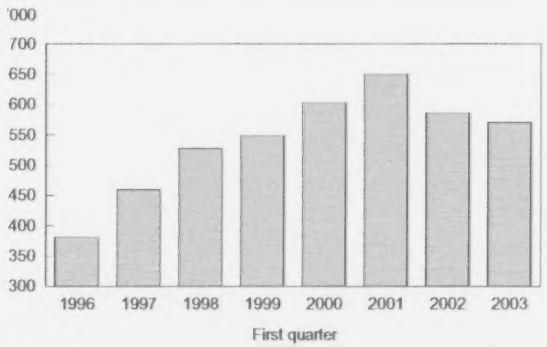
Chart A: Employment in high-tech industries stabilized in 2002.



Source: Labour Force Survey

The layoffs of 2001 hit core-age workers (25 to 54) and youths the most. However, the slight declines in these two groups between the first quarters of 2002 and 2003 were nowhere near those of a year earlier. The drop in employment eased for both men and women.

Manufacturing stable, telecommunications down

After shedding one in four workers between the first quarters of 2001 and 2002, the manufacturing part of the CT sector was essentially unchanged a year later. In the services component, a large drop in telecommunications employment was almost offset by a rebound in computer design and related services.

Low-skill jobs continued to take a hit

At several levels, high-tech employment stabilized. However, for the lowest skilled workers, it continued to fall sharply (Chart B).[3]

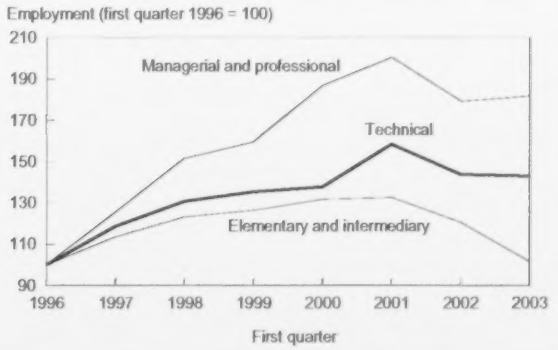
Table 1: Employment in CT industries

	First quarter			Change	
	2001	2002	2003	2002	2003
	'000			%	
Total	**649.8**	**585.7**	**570.0**	**-9.9**	**-2.7**
Manufacturing	**165.6**	**124.9**	**127.5**	**-24.6**	**2.1**
Services	**484.2**	**460.8**	**442.5**	**-4.8**	**-4.0**
Telecommunications	157.2	154.4	124.6	-1.8	-19.3
Computer systems design	256.8	237.6	254.4	-7.5	7.1
Location					
Toronto	197.8	152.8	159.0	-22.8	4.1
Montréal	104.7	99.4	102.7	-5.1	3.3
Ottawa	68.5	57.7	56.7	-15.8	-1.7
Vancouver	59.1	55.8	43.3	-5.6	-22.4
Rest of country	219.7	220.0	208.3	0.1	-5.3
Age					
15 to 24	66.1	52.8	49.9	-20.2	-5.6
25 to 54	556.5	500.6	487.6	-10.1	-2.6
55 and over	27.1	32.2	32.5	18.9	0.9
Sex					
Men	429.8	386.0	381.3	-10.2	-1.2
Women	220.0	199.6	188.7	-9.3	-5.5
Class of worker					
Employees	569.6	505.0	487.2	-11.3	-3.5
Self-employed	80.2	80.6	82.8	0.6	2.7
Occupation*					
Managerial and professional	**338.1**	**302.5**	**306.8**	**-10.5**	**1.4**
Managers	76.7	68.8	59.7	-10.2	-13.3
Engineers	45.5	31.3	34.8	-31.3	11.5
Computer programmers and systems analysts	193.9	179.6	191.1	-7.4	6.4
Other	22.0	22.9	21.1	3.9	-7.7
Technical	**180.4**	**163.8**	**162.7**	**-9.2**	**-0.7**
Line and equipment workers	29.2	25.3	22.1	-13.3	-12.9
Sales specialists	42.4	39.9	34.5	-6.0	-13.6
Engineering technicians	62.1	63.8	70.5	2.7	10.5
Other	46.7	34.8	35.6	-25.5	2.5
Intermediary and elementary	**131.3**	**119.4**	**100.6**	**-9.1**	**-15.8**
Assemblers in manufacturing	41.7	30.3	28.4	-27.2	-6.3
Clerical	76.5	73.4	59.3	-4.0	-19.2
Other	13.2	15.6	12.8	18.3	-18.0

Source: Labour Force Survey

* *Using skill definitions by Human Resources Development Canada*

Chart B: Declines persist in low-skill CT jobs.



Source: Labour Force Survey, using skill definitions by Human Resources Development Canada

The high-tech employment bust is usually viewed as beginning in the second quarter of 2001. However, for the lowest-skilled workers (those in occupations not normally requiring college or university education), layoffs began in the first quarter. The second quarter saw cuts for workers in occupations demanding an intermediary or technical skill, followed by higher skill managers and professionals in the third quarter.

Not only did cuts start sooner for the least educated in the high-tech industries, they also continued longer, making them the most severe. Following a decline of 12,000 (-9%) between the first quarters of 2001 and 2002, low-skill occupations suffered a further reduction of 19,000 (-16%) over the next four quarters. By the first quarter of 2003, only 101,000 of those working in CT industries had jobs that did not require postsecondary education—three-quarters the level of two years earlier.

At first, the sharp and prolonged employment drop for low-skilled workers was driven by a reduction in assemblers of high-tech manufactured goods. Between the first quarters of 2001 and 2002, their number plummeted 27%; however, the decline was much slower in the next year (-6%). More recently, the downturn among the lowest skilled was related to declining clerical staff, which fell 19% between the first quarters of 2002 and 2003.

The next wave of layoffs occurred among those in jobs normally requiring a college education, and began in the second quarter of 2001. By the first

quarter of 2002, this group experienced a reduction of 17,000 (-9%), driven by a sharp decline in telecommunications line and equipment workers, and administrative officers. Unlike lower-skilled occupations, the number of people working in jobs normally requiring a college education stabilized between the first quarters of 2002 and 2003. During this time, employment slipped only slightly (-1,000), much less than in the previous year.

As telecommunications line and equipment workers and technical sales specialists continued to become scarcer, engineering technicians experienced some gains. On average, for the first quarter of 2003, 163,000 CT workers were employed at jobs requiring a college education—10% below the level two years earlier. In the second quarter of 2001, employment for the highest skilled—managers and professionals—was at its peak. The employment decline in these occupations lasted a year, bottoming out in the second quarter of 2002.

In total, employment in the high-skilled occupations dropped 11% between the first quarters of 2001 and 2002. The following year, however, saw some recovery among managers and professionals. Compared with the first quarter of 2002, employment was up a slight 4,000 (1%) to 307,000. While managerial jobs continued to decline at a fast clip, some employment was added among engineers as well as computer programmers and systems analysts, the largest occupational group in the high-tech industries.

Because of the persistent decline in employment in lower-skill occupations in the past couple of years, the composition of the high-tech workforce has shifted in favour of occupations that normally require postsecondary education. While low-skilled occupations made up 20% of all employment in the CT industries in the first quarter of 2001, two years later that share had dropped to 18%. Meanwhile, occupations normally requiring a college education increased their share from 28% to 29%. High-skill management and professional employment also saw relative gains—from 52% to 54%.

Stagnant demand for workers, but earnings still inch up

While demand for high-tech workers decreased, as reflected in falling employment and rising unemployment rates, median wage rates for employees[4] did not fall (Chart C), in part because of the continued layoff of lower-skilled, lower-paid workers.

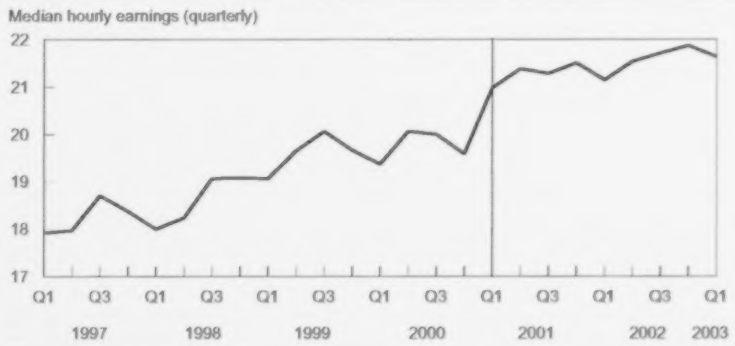
In the first quarter of 2003, median hourly earnings in CT were $21.63, 2% higher than a year earlier. Even during the worst of the high-tech cuts, earnings rose, albeit less than the cost of living. Between the first quarters of 2001 and 2002, median earnings rose 1%.

High-tech workers are paid much better on average than other workers. The median hourly earnings for all employees in the first quarter of 2003 were $16, 26% less than for those in the CT industries. While over 1 in 10 high-tech workers was paid $40 or more per hour, only 1 in 36 employees outside high-tech was paid this much.

The recent wage gains in high-tech pale in comparison with those in the sector's heyday when reports of occupational shortages were more widespread. In the two years preceding the first quarter of 2001, median earnings jumped 10%. In the most recent two years, median earnings increased only 3% (Table 2).

After the end of the high-tech employment boom, wage gains slowed for almost all occupations in the CT industries. The most dramatic example occurred among engineers. Between 1999 and 2001, median earnings for this group shot

Chart C: Earnings still rising, but at slower pace.



Source: Labour Force Survey

Table 2: Median hourly earnings in CT industries by occupation

	First quarter			Change	
	1999	2001	2003	Q1 1999 to Q1 2001	Q1 2001 to Q1 2003
		$			%
Total	**19.06**	**20.98**	**21.63**	**10.0**	**3.1**
Management	26.17	30.45	33.40	16.3	9.7
Business, finance and administrative	16.68	16.83	17.36	0.9	3.2
Natural and applied sciences and related	21.27	24.45	24.04	15.0	-1.7
Computer programmers and systems analysts	22.21	25.21	25.43	13.5	0.8
Engineers	24.12	31.73	32.69	31.6	3.0
Other	16.47	17.67	18.58	7.3	5.2
Sales and service	15.62	18.11	19.82	15.9	9.4
Technical sales	14.23	17.69	21.21	24.3	19.9
Other	16.96	20.13	13.14	18.7	-34.7
Trades, transport and equipment operators and related	20.93	21.67	22.89	3.5	5.7
Telecommunications line and equipment workers	22.83	23.10	24.14	1.2	4.5
Other	17.15	18.57	15.38	8.3	-17.2
Occupations unique to processing, manufacturing and utilities	11.94	12.28	12.86	2.9	4.7
Assemblers in manufacturing	11.58	11.75	12.49	1.4	6.3
Other	15.20	20.17	15.50	32.7	-23.2
All other	19.22	19.72	18.98	2.6	-3.8

Source: Labour Force Survey

to $31.73 per hour, an increase of almost 32%, whereas in the last two years, they inched up only 3%.

The largest occupation group, computer programmers and systems analysts, also showed a dramatically reduced growth rate in earnings. In the last two years of the boom, earnings for these workers increased 14%, but have changed little since the first quarter of 2001. At $25.43 per hour in the first quarter of 2003, their median earnings were a mere 1% higher than two years earlier.

Summary

Although high-tech layoffs subsided in 2002, firms continued to reduce employment in occupations that require the least skill and have only recently returned to hiring added managerial and professional staff.

This has meant a compositional shift in high-tech employment to a workforce with relatively more formal education. As a result, average earnings have continued to increase despite the drop in demand for workers. However, even though earnings continue to rise, they are not doing so at anywhere close to the rates seen during the boom years.

Perspectives

■ Notes

1 The computer and telecommunications (CT) industries form a subsector of the wider information and communications technology (ICT) sector. Essentially, they are the industries within the ICT sector that can be identified at a four-digit North American Industrial Classification System (NAICS) level. For more detail on what is included among the CT industries, consult Bowlby and Langlois (2002), p. 13.

2 The decline in the high-tech sector has been documented in Bowlby and Langlois (2002) and Vaillancourt (2003).

3 Human Resources Development Canada developed the skill levels used in this article. Embedded within each occupation code in the National Occupational Classification (NOC) is the skill level normally held by workers in the occupation. This skill level is based on the formal education normally required for the job, although the system also incorporates whether the job requires supervisory responsibility or significant health and safety responsibilities. For more information, see the HRDC Web site, www.hrdc-drhc.gc.ca, and search for 'National Occupational Classification.'

4 The Labour Force Survey does not collect earnings information from the self-employed.

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